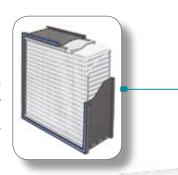


# Airstream<sub>®</sub> Horizontal Laminar Flow Clean Benches

### **Provide Product Protection**

### **ULPA Filtration System**

ULPA filters operate at a typical efficiency of >99.999% at 0.1 to 0.3 micron sizes, providing superior product protection over conventional HEPA filters.



## **High Performance Blower System**

 $\label{eq:German made ebm-papst} German made ebm-papst_{\circledast} \ permanently \\ lubricated, centrifugal motor/blowers \\ with external rotor designs.$ 

Motors are selected for energy efficiency, compact design, and flat profile. Completely integrated assembly optimizes motor cooling.

All rotating parts are balanced for smooth, quiet, vibration-free operation.



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### **User Interface**

An angled front, curved work surface front edge, and 34.5" tall work zone promotes ergonomics.

Air Cleanliness Standards					
(ISO 14644-1, Air Cleanliness Particle Limits					
(No. of Particles / m³)					

Particle	Cleanliness Class					
Size (µm)	Class 1	Class 2	Class 3	Class 4	Class 5	Class 6
0.1	10	100	1000	10000	100000	1000000
0.2	2	24	237	2370	23700	237000
0.3	-	10	102	1020	10200	102000
0.5	-	4	35	352	3520	35200
1.0	-	-	8	83	835	8320
5.0	-	-	-	-	29	293



## **Superior Air Cleanliness**

All Esco horizontal laminar flow clean benches provide ISO Class 3 air cleanliness within the work zone as per ISO 14644.1, significantly cleaner than the usual Class 5 classification on clean benches offered by the competition.





### Esco Standard Control System

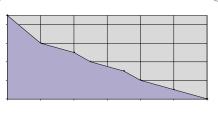
Reliable rocker switches and easy-to-read gauge for peace of mind and durability.

# **Quality Construction**

The clean bench interior is constructed of stainless steel which makes cleaning a breeze. A removable stainless steel diffuser protects the filter from accidental damage and improves airflow uniformity.

### Stable, Constant Airflow

The blower system automatically adjusts to maintain airflow as the filter loads in between annual certifications.



### **Built-In Protection**

External surfaces are powder coated with Esco **ISOCIDE**™ to eliminate 99.9% of surface bacteria within 24 hours of exposure.

## **Key Features**

- Airstream Series clean benches are useful for mycology, food microbiology, plant and mammalian cell culture, clinical pharmacy and hospital protocols, cleanrooms, semiconductor assembly, pharmaceutical, aerospace and medical devices industries, where product protection is required.
- ULPA filters (per IEST-RP-CC-001.3)
  tested to a typical efficiency of
  >99.999% for 0.1 to 0.3 micron
  particles are better than HEPA filters.
  ULPA filters last as long as conventional
  HEPA filters and have similar
  replacement costs.
- An additional disposable pre-filter traps large particles in the inflow air prior to reaching the main filter, protecting against damage and prolonging filter life.
- All Esco products are manufactured for the most demanding laboratory applications. All components are designed for maximum chemical resistance and enhanced durability for a long service life. The main body of the clean bench is constructed of industrialgrade electrogalvanized steel.
- One piece formed stainless steel work surface with a curved front edge is designed for maximum operator comfort. A raised edge at the back of the work zone prevents spills from damaging the filter.
- Built-in warm white, electronically ballasted, 5000k lighting provides excellent illumination of the work zone and reduces operator fatigue. The reliable lighting system is zero-flicker and instant start.
- Esco Laminar Flow Clean Benches have been tested for cross-contamination and product protection using microbiological test methods adopted from EN12469.
- Each clean bench is individually factory tested for safety and performance in accordance with international standards.

Standards Compliance Cabinet Performance

**Air Quality** 

**Filtration** 

**Electrical Safety** 

EN 12469 IEST-RP-CC002.2, Worldwide ISO 14644.1 Class 3, Worldwide AS 1386 Class 1.5, Australia JIS B9920 Class 3, Japan EN-1822 (H14), Europe IEST-RP-CC001.3, Worldwide IEST-RP-CC007.1, Worldwide IEST-RP-CC034.1, Worldwide IEC 61010-1 , Worldwide EN 61010-1 , Europe UL 61010-1 , USA CAN/ CSA-C22.2 , No.61010-1



All Esco Airstream, vertical and horizontal flow clean benches are covered by an extended 3 year warranty, excluding consumable parts and accessories. Contact your local Sales Representative for warranty details.

### **Support Stands**

- Fixed height, available 711 mm (28") or 860 mm (34")
  - With leveling feet (SPL)
  - With casters (SPC)

- Adjustable height, hydraulic range 711 mm (28") to 860 mm (34")
  - Manual or electrical lift (SPM)
- With casters

### **Electrical Outlets and Utility Fixtures**

- Electrical outlet, ground fault, North America
- Electrical outlet, Euro/ Worldwide
- Petcock (air, gas, vacuum)
  - North America (American) style.
  - Euro / Worldwide style DIN 12898, DIN 12919, DIN 3537

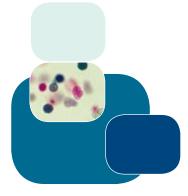
### **Cabinet Accessories**

- Germicidal UV lamp
- Transparent front cover (recommended when UV lamp is used)
- **PVC** armrest
- Height-adjustable lab chair
- Ergonomic foot rest
- IV bar, with hooks

General Specifications, Airstream Horizontal Laminar Flow Clean Benches						
Model		AHS-8C_				
External	Without Base Stand	2680 x 804 x 1480 mm (10	2680 x 804 x 1480 mm (105.5" x 31.6 x 58.3")			
Dimensions (W x D x H)	With Optional Base Stand, 863 mm (34") type	2680 x 804 x 2330 mm (10	5.5" x 31.6" x 91.7")			
Internal Work Area (W x D x H)		2600 x 626 x 880 mm (102.4" x 24.6" x 34.6")				
Air Volume (At Initial Velocity)		1805 m³h (1067 cfm)				
Laminar Airflow Velocity		Average of 0.45 m/s or 90 fpm				
Main Filter Type		ULPA filter with integral metal guards and filter frame gaskets; fully compliant with EN1822 and IEST-RP-CC001.3 requirements				
Main Filter Typical Efficiency		99.9995% at 0.3µm / 99.999% at MPPS				
Pre-Filter		Disposable and non-washable polyester fibers with 85% arrestance / EU3 rated				
Sound Emission as per IEST-RP-CC002.2		63.5 dBA				
Fluorescent Lamp Intensity		>1575 lux (>146 foot candles)				
Cabinet Main Body		1.2mm / 0.05" / 18 gauge electro-galvanised steel with white oven-baked epoxy powder coated finish				
Construction**	Work Zone	1.2 mm / 0.05" / 18 gauge st	tainless steel grade 304			
	Model	AHS-8C1	AHS-8C2			
	Voltage	220-240V, AC, 50Hz, 1Ø	110-120V, AC 60HZ, 1Ø			
	Cabinet Power/ Amp	(2 x 820 W) / (2 x 4.5 A)	(2 x 1200 W) / (2 x 12.5 A)			
Electrical	Outlet Maximum Amp	2 x 6 A	2 x 6 A			
	Total Maximum Amp	10.5 A	18.5 A			
	BTU/ Hr	2252	3071			
Net Weight		320 (705 lbs)				
Shipping Weight*		408 (899 lbs)				
Shipping Dimensions, Maximum (W x D x H)*		2750 x 900 x 1855 mm (108.3" x 35.4" x 73")				
Shipping Volume, Maximum*		4.90 m <sup>3</sup> (176 cu.ft)				

<sup>\*</sup> Cabinet only; excludes optional stand

<sup>\*\*</sup> Optional glass side available, contact manufacturer





# WORLD CLASS. WORLDWIDE.

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